

REMARKS

Applicants have received the Office Action mailed April 2, 2007. Applicants have amended claims 23-30 and added claims 31 and 32. Claims 1-32 are pending, and Applicants request reconsideration of the pending claims in view of the following remarks.

Claim Rejections—35 U.S.C. § 101

The Examiner rejected claims 23-30 under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter. Without conceding the propriety of the rejection, Applicants, in order to advance prosecution, have amended the claims to include the same preamble language on which the Office and the Applicant agreed in *In re Beauregard*, 35 U.S.P.Q.2d 1383 (Fed. Cir. 1995). Applicants therefore submit that the claims recite statutory subject matter.

Claim Rejections—35 U.S.C. § 102(e)

The Examiner rejected claims 1, 2, 3, 5, 9, 23-25 and 28 under 35 U.S.C. §102(e) as anticipated by U.S. Patent Application Publication 2005/0222975 (“Nayak”). The effective date of the Nayak reference is March 30, 2004—one day prior to the filing date of the present application. Submitted herewith is a Rule 1.131 Declaration in which the inventors of the present application swear behind the Nayak reference. Accordingly, Applicants request that the rejections based on Nayak be withdrawn.

By submitting the Rule 1.131 Declaration, Applicants expressly do not admit that the Nayak reference, if ultimately found to be prior art, either anticipates or renders obvious any claims in the present application.

Claim Rejections—35 U.S.C. § 102(b)

The Examiner rejected claims 1-10, 20 and 22-30 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 6,006,225 (“Bowman”). Claims 1 and 23 are the independent claims in the group. For the reasons outlined in greater detail below, Applicants traverse the rejections of claims 1-10, 20 and 22-30.

Independent claim 1 recites a method comprising receiving a first search query having a first content, the first content comprising a plurality of components; rewriting the first search query into a modified search query; mapping the first search query to the modified search query in a cache memory; receiving a second search query having a second content; determining whether at least a portion of the second content matches the first content; responsive to the at least one portion of the second content matching the first content, substituting the modified search query for the at least one portion of the second content to form a modified second search query; and issuing a search of the modified second search query having the substituted modified search query to return one or more search results as responsive to the received second search query.

The current Office Action rejected claim 1 under Bowman as follows:

Claims 1-10, 20, and 22-30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by US 6006225, known hereafter as Bowman.

7. *As per independent Claims 1, 5 and 23*, Bowman teaches the limitations as follows: receiving a first search query having a first content, comprising a plurality of components ; rewriting the first search query into a modified search query; (Col 13 line 65-col 14 line 15) mapping the first search query to the modified search query in a cache memory; (Col 8 lines 44-48 Teaches logging all queries, which include those which have been rewritten, col 8 lines 15-19 teach generating the mapping and storing it in a query correlation table, and col 5 line 37-38 teach the correlation table being stored in a cache memory) receiving a second search query having a second content', determining whether at least a portion of the second content is substantially identical to the first content; responsive to the at least one portion of the second content being substantially identical to the first content, substituting the modified search query for the at least one portion of the second content to form a modified second search query; and issuing a search of the modified second search query having the substituted modified search query to return one or more search results as responsive to the received second search query. (Col 6 lines 1 9-31 and Figure 1 item 133 is the backend data system) (Office Action mailed April 2, 2007, at pages 5-6.)

Contrary to the Examiner's assertion, Bowman does not disclose or suggest all elements of claim 1. In particular Bowman does not disclose or suggest receiving a first search query having a first content, comprising a plurality of components; rewriting the first search query into a modified search query; and mapping the first search query to modified search query in cache memory—*where the first search query comprises a plurality of components*. Rather, Bowman appears to describe a system that operates on individual query terms, rather than on multi-term queries *as a whole*. In particular, for example, the cited portion of Bowman (col. 13, line 65, to

col. 14, line 15) describes mapping the query term "ROUGH" to individual terms "GUIDE," "LONDON," and "TERRAIN," to form modified queries "ROUGH—GUIDE," "ROUGH—LONDON," and "ROUGH—TERRAIN." Bowman's FIGS. 1, 5A, 5B and 7 further clarify that Bowman's system operates on individual terms, rather than multi-term queries as a whole. This is particularly clear in FIG. 7, reproduced below, where in elements 710, 720 and 730, actions are taken with respect to "each term in the query," and in elements 750 and 760 multi-term queries are processed by "combin[ing] all related terms lists."

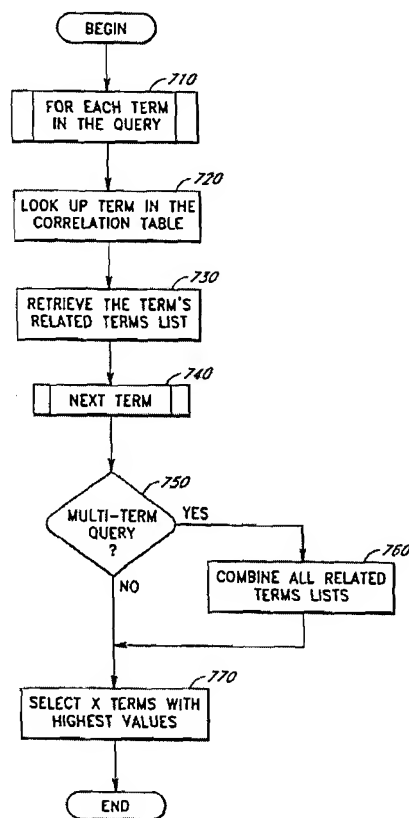


FIG. 7

That is, Bowman processes each term separately, and where there are multiple terms in a query, Bowman combines the results of separate processing of each term.

Bowman's approach of processing individual query terms is very different than Applicants' approach of processing queries as a whole. Processing queries as a whole is clearly described in Applicants' specification. For example, on page 12 of the originally filed specification Applicants describe that "an original user query 'City of New York' is rewritten as

a more common or popular phrase 'New York City.'" On the same page, Applicants provide another example wherein "an original user query for 'batman movie' is converted or modified to 'batman movie or robin movie' as a rewritten query." That Applicants claim 1 is currently directed to processing queries as a whole, rather than as individual search terms, is clear from the previous amendment wherein Applicants amended claim 1 to recite "receiving a first search query having a first content, the first content comprising a plurality of components."

Accordingly, for this reason alone, Bowman does not anticipate claim 1. Neither does Bowman render claim 1 obvious. Processing queries as a whole rather than as an aggregation of individual terms involves a different analysis which Bowman neither describes nor suggests. Moreover, the method recited in Applicants' claim 1 gives rise to significant advantages related to processing queries based on their context that Bowman does not contemplate.

Bowman lacks additional elements recited in Applicants' claim 1, and therefore, claim 1 is patentable for additional reasons that are independent of those presented above. In particular, Bowman does not disclose or suggest determining whether at least a portion of the second content matches the first content; responsive to the at least one portion of the second content matching the first content, substituting the modified search query for the at least one portion of the second content to form a modified second search query; and issuing a search of the modified second search query having the substituted modified search query to return one or more search results as responsive to the received second search query. Rather, Bowman describes receiving and processing an initial query, presenting results that are responsive to the initial query, providing related terms that best match the initial query, and allowing the user to select related terms in a separate, follow-up query. For example, at col. 7, starting at line 14, Bowman says:

In operation, when a user submits a *query* to the web site 130, the web server 131 passes the query to the query server 132, *and the query server applies the query to the bibliographic database 133.* If the number of items found exceeds a certain threshold (e.g., 50), the query server 132 invokes its related term selection process ("selection process") 139 to attempt to identify one or more related terms to suggest to the user. (Bowman, col. 7, lines 14-21; emphasis added.)

Nothing in Bowman is substituted. Bowman merely describes processing two separate queries—a first initial one, and a second, separate refined query—if one is provided by the system (e.g.,

because the number of results responsive to the first query exceeds a threshold number) and subsequently selected by the user. Accordingly, Bowman does not anticipate claim 1.

Bowman also does not render this aspect of claim 1 obvious. One of ordinary skill in the art would not consider it obvious to extend Bowman to *automatically substitute* a modified query for an initial query provided by the user. Bowman's own examples show that Bowman's system is not configured for such substitution. In particular, Bowman describes no way of distinguishing between possible modified queries when an initial query term is ambiguous. In particular, although Bowman's system can identify "ROUGH—GUIDE," "ROUGH—LONDON," and "ROUGH—TERRAIN" as modified queries corresponding to an initial query of "ROUGH," there is no suggestion as to how, for example, the system would select "ROUGH—GUIDE" rather than "ROUGH—LONDON," to substitute for "ROUGH." Bowman appears to avoid such a selection problem altogether by presenting all options to the user and allowing the user to select one or more separate *follow-up* queries to submit, subsequent to initial results being provided in response to an initial query. In contrast, *Applicants' system can substitute whole queries in the first instance*—a completely different and nonobvious approach in view of Bowman.

For the additional reasons presented above, Bowman does not anticipate claim 1 or render claim 1 obvious.

Applicants respectfully submit that claim 1 is in condition for immediate allowance, as are dependent claims 2-22. Independent claim 23 recites similar language as that discussed above with reference to independent claim 1. Therefore, independent claim 23 and corresponding dependent claims 24-30 are believed to be patentable over the Bowman for substantially the same reasons as those presented with respect to claim 1. Accordingly, Applicants ask for the withdrawal of the rejections based on Bowman.

Rejections under 35 U.S.C. § 103.

The Examiner rejected claims 11-19 and 21 alternatively under Bowman or Nayak. As described above, the inventors have submitted herewith a Rule 1.131 Declaration to antedate Nayak. Accordingly, Applicants submit that the 103 rejections based on Nayak should be withdrawn. Claims 11-19 and 21 depend from independent claim 1. Therefore, claims 11-19

and 21 are patentable over Bowman for at least the reasons provided above with respect to claim 1. Accordingly, Applicants request that the 103 rejections based on Bowman be withdrawn.

New Claims

New claims 31-32 have been added. Support for the new claims can be found throughout the originally filed specification and claims, including, for example, at ¶¶ 0025, 0029, 0034 and 0040, and in originally filed claims 1, 9, 23 and 28. Accordingly, no new matter has been added.

The new claims are patentable for the reasons presented above with respect to independent claims 1 and 23. Moreover, the new claims recite additional elements that provide additional bases of patentability. In particular, for example, with respect to new claim 31, none of the art of record, taken either alone or in combination, is believed to disclose or suggest “determining an indicator of frequency with which [a] first search query has been previously received at the search interface” and “when the first search query is determined, based on the indicator of frequency, to be among a group of most frequently received queries relative to other queries received at the search interface that are different than the first search query, rewriting the first search query into a modified search query and mapping the first search query to the modified search query in a cache memory.” With respect to new claim 32, for example, none of the art of record, taken either alone or in combination, is believed to disclose or suggest “executing a search of the first search query to produce a first set of results, and executing a search of the modified search query to produce a second set of results,” “providing the first set of results to a first subset of the plurality of different users, providing the second set of results to a second subset of the plurality of different users that is different than the first subset, and tracking responses to the first set of results and the second set of results” and “when tracked responses to the first set of results and second set of results indicate a user-preference for the second set of results, mapping the first search query to the modified search query in a memory.”

Conclusion

Applicants respectfully submit that pending claims 1-32 are in condition for allowance and request that they be allowed.

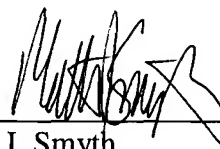
It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Submitted concurrently with this response is a Rule 1.131 Declaration, a Request for Continued Examination, and a Petition for Two-Month Extension of Time.

Please charge deposit account 06-1050 for the Request for Continued Examination fee, the Extension of Time fee and excess claims fees in the amount of \$400. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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